

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (previously presented):      A method for controlling devices that are currently connected to a physical layer of a network, the method comprising the steps of:

for at least one of said devices:

- (a)      discovering a plurality of devices that are currently connected to the network;
- (b)      obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to physical layer of the network, wherein the information includes at least a device name and service type, and  
  
            wherein the physical layer provides a communication medium that can be used by the plurality of devices to communicate with each other;
- (c)      generating a graphical user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and
- (d)      displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

Claim 2 (previously presented): The method of claim 1, wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type.

Claim 3 (previously presented): The method of claim 1, wherein the user interface further includes device data corresponding to each device based on the information obtained from each device.

Claim 4 (previously presented): The method of claim 1, wherein the step (c) of generating the user interface further includes the step of associating a hyper-text link with the information in each of said devices currently connected to the network, such that each hyper-text link provides access from the user interface to the information in an associated device.

Claim 5 (previously presented): The method of claim 1, wherein said information in each device comprises an HTML page for user interaction with and/or control of that device.

Claim 6 (previously presented): The method of claim 1, wherein the device information in each device includes device identification information for that device.

Claim 7 (canceled)

Claim 8 (previously presented): The method of claim 2, wherein each reference in the user interface includes at least one electronic link providing direct access from the user interface to at least the user control interface description.

Claim 9 (previously presented): The method of claim 8, wherein the user interface includes device data corresponding to each device based on the information obtained from each device, and wherein when the one link in the user interface is user activated the activated link is used to access the associated device and retrieve control interface description contained in the associated device to generate and display a device user interface based on the retrieved control interface description, for user interaction with that associated device.

Claim 10 (previously presented): A network system for performing a service, comprising:

- a physical layer providing a communication medium that can be used by connected devices to communicate with each other;
- at least one of the connected devices storing information for user interaction with the at least one device;
- an agent in the at least one device for:
  - (a) discovering the plurality of devices that are currently connected to the physical layer of the network;
  - (b) obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to the

physical layer of the network,

wherein the information includes at least a device name and service type;

(c) generating a graphical user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and

(d) displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

Claim 11 (previously presented): The network system of claim 10 wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type.

Claim 12 (previously presented): The network system of claim 10, wherein the user interface further includes device data corresponding to each device based on the information obtained from each device.

Claim 13 (previously presented): The network system of claim 10, wherein the agent further associates a hyper-text link in the with the information in each of said devices currently connected to the network, such that each hyper-text link provides access from the user interface to the information in an associated device.

Claim 14 (previously presented): The network system of claim 10, wherein each reference in the user interface includes at least one electronic link providing direct access from the user interface to at least the user control interface description.

Claims 15-17 (canceled)

Claim 18 (previously presented): The network system of claim 11, wherein the agent generates the user interface such that the user interface further includes device data corresponding to each device based on the information obtained from each device, the device data providing at least one electronic link to the user interface in each device, such that when the one link is user activated the activated link is used to access the associated device and retrieve control interface description contained in the associated device to generate and display a device user interface based on the retrieved control interface associated for user interaction with that corresponding device.

Claim 19 (previously presented): The network system of claim 10 further comprising means for using each link in the user interface to access the information in each associated device, and generating the user interface including device data corresponding to each device using the accessed information in each device.

Claim 20 (previously presented): A network system for performing a service, comprising:

a physical layer, wherein the physical layer provides a communication medium than can be used by connected devices to communicate with each other in the network;

multiple devices connected to the physical layer, one or more of the multiple devices storing information for user interaction with that device, and one or more of the multiple devices each including an agent for:

- (a) discovering a plurality of devices that are currently connected to the network in an autonomous manner;
- (b) obtaining information for commanding and controlling at least one of the plurality of devices by at least one other device currently connected to the physical layer of the network, wherein the information includes at least a device name and service type;
- (c) generating a graphical user interface based at least on the obtained information, the user interface including one or more references associated with each of the devices currently connected to the network; and
- (d) displaying the generated user interface such that a user can use each reference of the displayed user interface to access each device.

Claim 21 (previously presented): The network system of claim 20, wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type.

Claim 22 (previously presented): The network system of claim 20, wherein the user interface further includes device data corresponding to each device based on the information obtained from each device.

Claim 23 (previously presented): The network system of claim 20, wherein each agent further associates a hyper-text link in the user interface with the information in each of said devices currently connected to the network, such that each hyper-text link provides access from the user interface to the information in an associated device.

Claim 24 (previously presented): The network system of claim 20, wherein each reference in the user interface includes at least one electronic link providing direct access from the user interface to at least the user control interface description.

Claims 25-27 (canceled)

Claim 28 (previously presented): The network system of claim 21, wherein each agent generates the user interface such that the user interface further includes device data corresponding to each device based on the information obtained from each device, the device data providing a link to the user interface in each device, such that when the link is user activated the activated link is used to access the associated device and retrieve control interface description

contained in the associated device to generate and display a device user interface based on the retrieved control interface description, for user interaction with that associated device.

Claim 29 (previously presented): The method of claim 1, wherein the network is a home network.

Claim 30 (previously presented): The method of claim 29, wherein the graphical user interface employing browser technology to allow users to control and command devices over the home network.

Claim 31 (previously presented): The method of claim 1, wherein the generated user interface includes at least one icon graphic for a device.

Claim 32 (previously presented): The method of claim 31, wherein the generated user interface includes a hierarchy of control pages.

Claim 33 (previously presented): The method of claim 1, wherein the service type comprises a type of service that each device can provide and the user control interface is generated and displayed based on at least an attribute and capability of the service type, each reference in the user interface includes at least one electronic link providing direct access from the user interface to at least the user control interface description, the user interface includes device data



corresponding to each device based on the information obtained from each device, and upon the one link in the user interface being user activated, the activated link is used for accessing the associated device and retrieving control interface description contained in the associated device for generating and displaying a device user interface based on the retrieved control interface description, for user interaction with that associated device.

Claim 34 (new):       The method of claim 1, wherein the at least one of said devices, that performs steps (a)-(d), can be controlled by another device currently connected to the network.